

THE INVENTION CLAIMED IS:

Sub A4

1 A method for manufacturing a flat panel display comprising:
5 providing a baseplate and a faceplate;
desorption processing the faceplate in a vacuum;
merging the baseplate and the faceplate; and
sealing the vacuum between the baseplate and the faceplate.

2. The method as claimed in claim 1 wherein the desorption processing uses a
vacuum from 10^{-7} to 10^{-8} torr.

3. The method as claimed in claim 2 wherein the desorption processing includes
10 scrubbing the faceplate before sealing the vacuum between the baseplate and the faceplate.

4. The method as claimed in claim 3 wherein the scrubbing the faceplate uses
plasma sputtering.

5. The method as claimed in claim 4 wherein the plasma sputtering uses a low
atomic weight gas.

15 6. The method as claimed in claim 4 wherein the plasma sputtering uses ions and
a faceplate voltage of -10 to -1000 mV.

7. The method as claimed in claim 4 wherein the plasma sputtering uses
electrons and a faceplate voltage of +10 to +1000 mV.

8. The method as claimed in claim 4 wherein the plasma sputtering applies a
20 faceplate voltage for about 1 to 60 minutes.

9. The method as claimed in claim 1 wherein the desorption processing includes
pre-aging the faceplate.

10. The method as claimed in claim 9 wherein the pre-aging the faceplate is
performed from 120 to 300 minutes.

25 11. The method as claimed in claim 10 wherein the desorption processing includes
pre-aging before merge of the baseplate and the faceplate.

12. The method as claimed in claim 11 wherein the pre-aging uses irradiation with
electrons from an electron gun.

30 13. The method as claimed in claim 12 wherein the pre-aging uses irradiation with
electrons having a current density of 5 to 10 times higher than that of the faceplate during
normal operation.

14. The method as claimed in claim 10 wherein the desorption processing includes pre-aging after merge of the baseplate and the faceplate.

15. The method as claimed in claim 14 wherein the pre-aging includes application of a voltage of 6 to 9 kV between the baseplate and the faceplate.

5 16. A method for manufacturing a flat panel display comprising:
providing a baseplate and a faceplate;
desorption processing the faceplate by scrubbing with plasma sputtering in a
vacuum;
merging the baseplate and the faceplate in the vacuum after the plasma
10 sputtering; and
sealing the vacuum between the baseplate and the faceplate.

15 17. A method for manufacturing a flat panel display comprising:
providing a baseplate and a faceplate;
desorption processing the faceplate by scrubbing with ion plasma sputtering in
a vacuum;
merging the baseplate and the faceplate in the vacuum after the ion plasma
sputtering; and
sealing the vacuum between the baseplate and the faceplate.

20 18. A method for manufacturing a flat panel display comprising:
providing a baseplate and a faceplate;
desorption processing the faceplate by scrubbing with electron plasma
sputtering in a vacuum;
merging the baseplate and the faceplate in the vacuum after the electron
plasma sputtering; and
25 sealing the vacuum between the baseplate and the faceplate.

25 19. A method for manufacturing a flat panel display comprising:
providing a baseplate and a faceplate;
desorption processing the faceplate by pre-aging using electron irradiation in a
vacuum;
merging the baseplate and the faceplate in the vacuum after the electron
irradiation; and
sealing the vacuum between the baseplate and the faceplate.

30 20. A method for manufacturing a flat panel display comprising:

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providing a baseplate and a faceplate;
merging the baseplate and the faceplate;
evacuating between the baseplate and the faceplate;
desorption processing the faceplate by pre-aging using electron irradiation
during the evacuating between the baseplate and the faceplate to form
a vacuum therebetween; and
sealing the vacuum between the baseplate and the faceplate after the pre-
aging.